



PTO/SB/21 (08-03)

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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)	Application Number	10/673,483	
	Filing Date	September 30, 2003	
	First Named Inventor	Nimal G. SENARATH et al.	
	Art Unit	2681	
	Examiner Name		
Total Number of Pages in This Submission	28	Attorney Docket Number	PAT 2189-2

**ENCLOSURES (Check all that apply)**

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input checked="" type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 1. Two References 2. Form PTO-1449
<b>Remarks</b> We filed a Revocation and Appointment of Agent on March 5, 2004. Enclosed is a copy of our submission and supporting documents for your reference.		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual name	Dennis R. Haszko (Reg. No. 39,575) Customer Number 26123
Signature	
Date	April 6, 2004

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name			
Signature		Date	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: SENARATH, Nimal Gamini; CHEONG, Yoon Chae; PERIYALWAR, Shalini; MATYAS, Robert  
Serial No.: 10/673,483  
Filed: September 30, 2003  
Title: BEAM WOBBLING FOR INCREASED DOWNLINK COVERAGE AND CAPACITY  
Group: 2681  
Examiner:  
Attorney Ref.: PAT 2189-2 US

April 6, 2004

Mail Stop DD  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450  
U.S.A.

Dear Sir:

**INFORMATION DISCLOSURE STATEMENT**

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, the applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

**I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION**

The patents, publications, or other information submitted for consideration by the Office are listed on the PTO-1449, attached hereto.

**II. COPIES**

**(check at least one box)**

- ☐ a. Submitted herewith is a legible copy of (i) each U.S. and foreign patent and application; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
- ☒ b. As this application was filed after June 30, 2003, no U.S. patent or published application copies are enclosed. Where applicable, submitted herewith is a legible copy of (i) each foreign patent or application; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.

- ☐ c. Some or all of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should already be in the PTO file. If copies are needed, please contact the undersigned.

**III. CONCISE EXPLANATION OF THE RELEVANCE**  
**(check at least one box)**

- ☒ a. DOCUMENTS IN THE ENGLISH LANGUAGE  
The attached patents, publications, or other information in the English language do not require a statement of relevancy.
- ☐ b. DOCUMENTS NOT IN THE ENGLISH LANGUAGE  
A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:
- ☐ c. ENGLISH LANGUAGE SEARCH REPORT  
An English language version of the search report or action that indicates the degree of relevance found by the foreign Patent Office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(A) (3).
- ☐ d. OTHER  
The following additional information is provided for the Examiner's consideration.

**IV. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97 (b):**  
**(check one box)**

- ☐ a. Within three months of the filing date of a national application (37 C.F.R. § 1.97 (b) (1)). No fee or statement is required. (This section is not to be used with RCE's AND CPA's.)
- ☐ b. Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97 (b) (2)). No fee or statement is required.
- ☐ c. Concurrently with the filing of a Continued Prosecution Application under 37 C.F.R. § 1.53 (d) or concurrently with the filing of a Request for Continued Examination under § 1.114 (37 C.F.R. § 1.97 (b) (4)). No fee or statement is required.

- ☒ d. Before the mailing date of a first Action on the merits (37 C.F.R. § 1.97 (b) (3)). No fee or statement is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97 (e) below, or, if no statement has been made, charge our deposit account in the amount of **\$180.00** as required by 37 C.F.R. § 1.17 (p).

**V. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97 (c):**  
**(check one box)**

- ☐ a. No statement; therefore, a fee in the amount of **\$180.00** as required by 37 C.F.R. § 1.17 (p).
- ☐ b. See the statement below. No fee is required.

**VI. STATEMENT UNDER 37 C.F.R. § 1.97 (e)**  
**(check only one box)**

The undersigned hereby states that

- ☐ a. Each item of information contained in the IDS was first cited in any communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
- ☐ b. No item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of IDS was known to any individual designated in 37 C.F.R. § 1.56 (c) more than three months prior to the filing of the IDS.
- ☐ c. Some of the items of information were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart from a foreign Patent Office in a counterpart foreign application and, to the best of my knowledge after making reasonable inquiry, was known to any

individual designated in the 37 C.F.R. § 1.56 (c) more than three months prior to the filing of this statement.

**VII. PAYMENT OF FEES**

**(check one box)**

- ☐ A cheque in the amount of **\$180.00** as required by 37 C.F.R § 1.17 (p) is enclosed for the above-identified fee.
- ☐ Please charge Deposit Account No. 501593 in the amount required by 37 C.F.R. § 1.17 (p) for the above-indicated fee. A duplicate copy of this paper is attached.
- ☒ No fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 501593.

**If the preceding amount is incorrect, any deficiency or overpayment should also be charged or credited to Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP.**

Respectfully submitted,  
Nimal Gamini SENARATH et al.



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DRH/AAB/aab  
Encls.

- ☒ PTO-1449
- ☒ Two References



<b>Form PTO-1449</b>  <b>INFORMATION DISCLOSURE STATEMENT</b>				<b>Complete if Known</b>	
				Application No.:	10/673,483
				Filing Date:	September 30, 2003
				First Named Inventor:	Nimal Gamini SENARATH et al.
				Group Art Unit:	2681
Examiner Name:					
Sheet	1	of	1	Attorney Docket No.:	PAT 2189-2

### U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document No.	Date of Publication mm-dd-yyyy	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

### FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Patent Document No.	Date of Publication mm-dd-yyyy	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ✓	Check if English Translation is attached

### OTHER DOCUMENTS

		Shim et al., "Should the Smart Antenna Be A Tracking Beam Array or Switching Beam Array?", <i>IEEE Vehicular Technology Conference</i> , 1998, pp. 494-498.
		Zekavat et al., "Smart Antenna Arrays With Oscillating Beam Patterns: Characterization of Transmit Diversity in Semi-Elliptic Coverage", <i>IEEE Transaction on Communications</i> , Vol. 50, No. 10, October 2002, pp. 1549-1556.

Examiner Signature:	Date Considered:
<b>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if in conformance and not considered. Include copy of this form with next communication to applicant.</b>	